SYSTEM AND METHOD FOR ADJUSTABLE DISCONNECTION SENSITIVITY FOR DISCONNECTION AND OCCLUSION DETECTION IN A PATIENT VENTILATOR

ABSTRACT OF THE DISCLOSURE

The system and method for detecting disconnection and occlusion of a tubing system of a patient ventilator detects disconnection of the tubing system, opens the exhalation valve, delivers an idle flow of breathing gas to the tubing system, disables breath triggering, and generates an alarm. A reconnection of the tubing system can also be detected, to initiate resumption of pressure supported inspiration. For occlusion detection, the pressure drop in the tubing system is determined by pressure sensors in the inspiratory and expiratory airways of the tubing system. The two pressure drop values are compared, and once occlusion is detected, an alarm is generated, and the ventilator responds to protect the patient from over distension. Abatement of the occlusion can also be monitored in a pressure based occlusion status cycling mode, and the ventilator can revert back to normal ventilation when either circuit occlusion or exhaust port occlusion are not detected.